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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-------------|----------------------|-----------------------|------------------|
| 10/619,908 | 07/15/2003 | Paul Gerard D'Arcy | D'ARCY 15-6-7 | 7183 |
| 47396 | 7590 | 06/21/2007 | EXAMINER | |
| HITT GAINES, PC | | | DILDINE JR, R STEPHEN | |
| LSI Corporation | | | | |
| PO BOX 832570 | | | ART UNIT | PAPER NUMBER |
| RICHARDSON, TX 75083 | | | 2133 | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 06/21/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

**Supplemental
Notice of Allowability**

Application No.

10/619,908

Examiner

R. Stephen Dildine

Applicant(s)

D'ARCY ET AL.

Art Unit

2112

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

R. Stephen Dildine
Primary Examiner
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Allowable Subject Matter

Claims 1-22 are allowed.

The following is an examiner's statement of reasons for allowance: In the specification, applicant makes the following statements which indicate that the reduction unit and the checksum unit include software or microcode embodiments which fall within a 35 U.S.C. 101 judicial exception to patentable subject matter:

[0008] "For purposes of the present invention, the phrase "configured to" means that the device, the system or the subsystem includes the necessary software, hardware, firmware or a combination thereof to accomplish the stated task" (emphasis added).

[0025] "One skilled in the art should know that the reduction checksum generator 200 may have additional circuitry that is not illustrated. Also, in other embodiments, the checksum unit 230 may be a conventional checksum generator. In addition, the reduction checksum generator 200 may be embodied in hardware, software, firmware, microcode or a combination thereof" (emphasis added).

[0053] "In addition, the parallel reduction checksum generator 700 may be embodied in hardware, software, firmware, microcode or a combination thereof" (emphasis added).

M.P.E.P. 2106 states: "USPTO personnel must ascertain the scope of the claim to determine whether it covers either a 35 U.S.C. 101 judicial exception or a practical application of a 35 U.S.C. 101 judicial exception. The conclusion that a particular claim includes a 35 U.S.C. 101 judicial exception does not end the inquiry because the practical application of a judicial exception may qualify for patent protection. "It is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." Diehr, 450 U.S. at 187, 209 USPQ at 8 (emphasis in original); accord Flook, 437 U.S. at 590, 198 USPQ at 197; Benson, 409 U.S. at 67, 175 USPQ at 675. Thus, "[w]hile a scientific truth, or the mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be." Diehr, 450 U.S. at 188, 209 USPQ at 8-9 (quoting Mackay, 306 U.S. at 94); see also Corning v. Burden, 56 U.S. (15 How.) 252, 268, 14 L.Ed. 683 (1854)("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . .").

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It is noted that applicant states, at [0021] "Referring to FIG. 2, illustrated is a block diagram of an embodiment of a reduction checksum generator, generally designated 200, constructed according to the principles of the present invention. The reduction checksum generator 200 is configured to calculate a checksum value for a message stored in a block of data 202. The block of data 202 may be conventional memory or a special buffer associated with the reduction checksum generator 200. The block of data 202 may also hold multiple messages for processing by the reduction checksum generator 200. The block of data 202 is configured into segments, where each segment contains a specific number of bits" (emphasis added), therefore the claimed software or microcode requires the presence or "said memory block" in order to function, and therefore provides a useful, concrete and tangible result, so therefore is patentable under 35 U.S.C. 101.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Stephen Dildine whose telephone number is (571) 272-3820. The examiner can normally be reached on M - F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

R. Stephen Dildine
Primary Examiner
Art Unit 2112

R. Stephen Dildine
Primary Examiner A.U. 2112